

ABSTRACT OF THE DISCLOSURE

[0028] A touch screen or pen-based data entry apparatus and method. The data entry apparatus creates a continuous sheet or “lamina” of light in the free space adjacent a touch screen. An optical position detection device, optically coupled to the lamina of light, is provided to detect data entries to the input device by determining the location of interrupts in the lamina caused when data is entered to the input device. During the method of operation, a user makes a data entry to the device by touching the screen at a predetermined location using an input device, such as a finger, pen or stylus. During the act of touching the screen, the lamina of light in the free space adjacent the screen is interrupted. The optical position detection device detects the position of the input based on the location of the interrupt. Based on the determined position, the data entry is determined.